

REMARKS/ARGUMENTS

Favorable consideration of this application is respectfully requested.

Claims 95-108, 112, and 115 are pending in this application. Claims 105-108, 112, and 115 are withdrawn from consideration as directed to a non-elected invention. Claims 95 and 102 were objected to for informalities. Claims 95-98, 100-102, and 104 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. patent 5,659,626 to Ort et al. (herein "Ort"). Claims 99 and 103 were objected to as dependent upon a rejected base claim, but were noted as allowable if rewritten in independent form to include all of the limitations of their base claim and any intervening claims.

Initially, applicants gratefully acknowledge the indication of the allowable subject matter in claims 99 and 103.

Addressing first the objection to claims 95 and 102, that objection is traversed by the present response.

Claims 95 and 102 were objected to as the parenthetical comments were not clear as to whether they were part of the claims. In reply claims 95 and 102 are amended to no longer recite any parenthesis to clarify the claim scope. Claim 107 is also so amended. The amendments to claims 95 and 102 are believed to address the objections thereto.

Addressing now the rejection of claims 95-98, 100-102, and 104 under 35 U.S.C. § 102(b) as anticipated by Ort, that rejection is traversed by the present response.

Initially, applicants note each of independent claims 95 and 102 is amended by the present response to clarify features recited therein. Specifically, those claims now further recite:

said group of data is edge detection data obtained by edge detecting image pick-up data of each of pixels obtained by picking up different image patterns in a predetermined image pick-up field in accordance with positions of said pixels, and said boundary candidates are positions of said pixels.

The basis for the outstanding rejection cites Ort at column 24, lines 57-65, column 21, lines 45-56, and column 19, lines 20-28 to meet the claim features directed to the estimating N boundary candidates and extracting M boundary candidates.

Ort, as explained at the noted portions, is directed to a method for locating minutia in a gray scale image of a fingerprint using a pair of filters, referred to as “Gabor” and “Minutia” filters. Ort discloses that the pair of filters, the “Gabor” and “Minutia” filters, is a band-pass filter in a spatial frequency for detecting a line such as a ridge flow.¹ In Ort the data that is filtered by the “Gabor” and “Minutia” filters becomes a group of data.

In contrast to Ort, in the claims as currently written “edge detection data” obtained by edge detecting image pick-up data in accordance with positions of pixels becomes a group of data, which applicant submits differs from Ort. In other words, the claimed “group of data” that is to be divided in the claimed invention differs from that in Ort. Ort does not disclose or suggest that “edge detection data is the group of data to be divided”.

Moreover, independent claims 95 and 102 further recite “said boundary candidates are positions of said pixels”. That feature was previously recited in allowable claims 99 and 103. Applicants respectfully submit Ort further neither discloses nor suggests that “positions of said pixels” are used as boundary candidates for dividing the group of data, and that the “positions of said pixels” are estimated.

In view of these foregoing comments applicants respectfully submit each of amended independent claims 95 and 102, and the claims dependent therefrom, patentably distinguish over Ort.

Applicants also note the presence of withdrawn claims 105-108, 112, and 115 in the present application. However, each of claims 105-108 and 115 depend from one of the pending claims, and thus should be properly reinstated. Further, with respect to withdrawn

¹ See for example Ort at col. 19, line 13 et seq.

claim 112, claim 112 is also amended by the present response similarly as in independent claims 95 and 102, and thereby claim 95 is believed to be generic to amended claim 112. That is, each feature recited in claim 95 is also required in amended claim 112, and thus claim 112 is also clearly allowable and should be reinstated.

In view of the present response applicants respectfully submit the present application is in condition for allowance. An early and favorable consideration of the present application is hereby respectfully requested.

Respectfully submitted,

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